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CLAIMS modifications/changes:

Applicant requests that all claims of record be cancelled and new claims 25 to 32 be substituted as follows:

Claims 1-24: (Cancelled)

- 25. (new) A method for monitoring and controlling, from a host computer, the real-time logic state of a plurality of target devices in a boundary scan chain, comprising:
 - (a) displaying graphical representations of said target devices on a graphical display device connected to said host computer,
 - (b) running boundary scan operations on said target devices to collect information about said target devices and storing said information in said host computer for said displaying operation,
 - (c) updating said graphical representations with said information to visually indicate current real-time logic state of said target devices,
 - (d) initiating and running boundary scan operations via a method that frees the user from generating, preparing, or otherwise creating test vectors,
 - (e) initiating and running boundary scan operations via a method that frees the user from supplying test executives,
 - whereby a human can view and manipulate a boundary scan enabled device via a graphical user interface.
 - 26. (new) The method of claim 25 further comprising modifying the attributes of said graphical representations to help organize and simplify monitoring of said boundary scan chain.
 - 27. (new) The method of claim 25, further comprising providing a plurality of virtual indicators to augment and simplify the display of boundary scan information.

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- 28. (new) The method of claim 27 wherein said indicators are graphical representations of light emitting diodes.
- 29 (new) The method of claim 25, further comprising providing a plurality of virtual controls to augment and simplify the control of data in a boundary scan chain.
 - 30. (new) The method of claim 29 wherein said indicators appear as graphical representations of mechanical switches.
- 31. (new) The method of claim 25, further comprising providing a graphical representation of an input-output port on said host computer used to perform boundary scan operations, whereby said input-output port graphical representation serves to visually remind the user which port is controlling the scan chain.
- **32.** (new) A method for creating graphical representations of target devices from user-provided boundary scan description files, comprising the steps of:
 - (a) opening a boundary scan description language file pointed to by a user;
 - (b) extracting a plurality of physical attributes of a target device from said file,
 - (c) creating a graphical representation based on said plurality of physical attributes found in said file, and
 - (d) displaying a plurality of said graphical representations on a host computer display.